WHAT IS CLAIMED IS
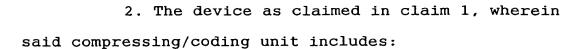
5

1. A device for processing images, comprising:

a compressing/coding unit which encodes image data including a plurality of color components to produce fixed-length codes;

10   a memory unit which stores therein the codes produced by said compressing/coding unit;

a distribution-measurement unit which measures a distribution of the color components concurrently with the encoding of the image data performed by said

15   compressing/coding unit; and

a memory-control unit which releases a memory space assigned to part of the codes relating to colors in said memory unit if said distribution-measurement unit detects that the distribution concentrates on a

20   particular color composition, and records data indicative of the particular color composition in said memory unit.

25

2. The device as claimed in claim 1, wherein said compressing/coding unit includes:

a color-conversion unit which converts an input image into the image data including the plurality

5   of color components;

a compression unit which compresses the image data supplied from said color-conversion unit; and

a quantization unit which quantizes the compressed image data supplied from said compression

10   unit.

15   3. The device as claimed in claim 2, wherein said compression unit carries out sub-band conversion to compress the image data supplied from said color-conversion unit.

20

4. The device as claimed in claim 2, wherein said compressing/coding unit further includes a block-

25   division unit which divides the input image into a

plurality of blocks before the input image is supplied to said color-conversion unit.

5

5. The device as claimed in claim 1, wherein the codes produced by said compressing/coding unit includes brightness information, structure information,

10   and color information.

15   6. The device as claimed in claim 1, wherein said compressing/coding unit includes:

a compression unit which compresses the image data including the plurality of color components wherein the plurality of color components are R, G, and B

20   components; and

a quantization unit which quantizes the compressed image data supplied from said compression unit.

25

7. The device as claimed in claim 6, wherein said distribution-measurement unit measures the distribution of the color components with respect to a (R-G) component and a (B-G) component.

5

8. An image processing system, comprising:

10   a scanner unit which reads an original image;

a compressing/coding unit which encodes image data including a plurality of color components to produce fixed-length codes;

a memory unit which stores therein the codes

15   produced by said compressing/coding unit;

a distribution-measurement unit which measures a distribution of the color components concurrently with the encoding of the image data performed by said compressing/coding unit;

20   a memory-control unit which releases a memory space assigned to part of the codes relating to colors in said memory unit if said distribution-measurement unit detects that the distribution concentrates on a particular color composition, and records data

25   indicative of the particular color composition in said

memory unit; and

a printer unit which prints data obtained after decoding the codes stored in said memory unit.

5

9. The image processing system as claimed in claim 8, further comprising an image decoding unit which

10 reads the codes and the data indicative of the particular color composition from said memory unit, and decodes the codes, followed by determining color components of the decoded image according to the data indicative of the particular color composition.

15

10. The image processing system as claimed in

20 claim 8, wherein said compressing/coding unit includes:

a color-conversion unit which converts data of the original image into the image data including the plurality of color components;

a compression unit which compresses the image

25 data supplied from said color-conversion unit; and

a quantization unit which quantizes the compressed image data supplied from said compression unit.

5

11. The image processing system as claimed in claim 10, wherein said compression unit carries out sub-band conversion to compress the image data supplied from said color-conversion unit.

10

15

12. The image processing system as claimed in claim 10, wherein said compressing/coding unit further includes a block-division unit which divides the data of the original image into a plurality of blocks before the data of the original image is supplied to said color-conversion unit.

20

25

13. The image processing system as claimed in claim 8, wherein the codes produced by said compressing/coding unit includes brightness information, structure information, and color information.

5

14. The image processing system as claimed in 10   claim 8, wherein said compressing/coding unit includes:

a compression unit which compresses the image data including the plurality of color components wherein the plurality of color components are R, G, and B components; and

15   a quantization unit which quantizes the compressed image data supplied from said compression unit.

20   15. The image processing system as claimed in claim 14, wherein said distribution-measurement unit measures the distribution of the color components with respect to a (R-G) component and a (B-G) component.

25

16. A method of encoding images, comprising the steps of:

encoding image data including a plurality of color components to produce fixed-length codes;

5   storing the codes in a memory;

measuring a distribution of the color components concurrently with the encoding of the image data; and

releasing a memory space assigned to part of 10 the codes relating to colors in said memory if the distribution concentrates on a particular color composition, and recording data indicative of the particular color composition in said memory.

15

17. The method as claimed in claim 16, wherein said step of encoding image data includes the steps of:

20   compressing the image data including the plurality of color components wherein the plurality of color components are R, G, and B components; and

quantizing the compressed image data.

25

18. The method as claimed in claim 17, wherein said step of measuring a distribution of the color components measures the distribution of the color components with respect to a (R-G) component and a (B-G)

5   component.

10   19. A computer-readable medium having a program embodied therein for causing a computer to encode images, said program comprising the program-code steps of:

encoding image data including a plurality of
15   color components to produce fixed-length codes;

storing the codes in a memory;

measuring a distribution of the color components concurrently with the encoding of the image data; and

20   releasing a memory space assigned to part of the codes relating to colors in said memory if the distribution concentrates on a particular color composition, and recording data indicative of the particular color composition in said memory.

25

20. The computer-readable medium as claimed in claim 19, wherein said program-code step of encoding image data includes the program-code steps of:

compressing the image data including the

5   plurality of color components wherein the plurality of color components are R, G, and B components; and

quantizing the compressed image data.

10

21. The computer-readable medium as claimed in claim 20, wherein said program-code step of measuring a distribution of the color components measures the

15   distribution of the color components with respect to a (R-G) component and a (B-G) component.